# WATER CHEMIST II

### MILWAUKEE WATER WORKS

The eligible list resulting from this examination may be used to fill similar City of Milwaukee positions.

**PURPOSE:** Validate and verify the precision and accuracy of on-line water quality process and control instrumentation used throughout the water treatment process. Help ensure that the reliability of the water quality information and data from the on-line process and control instrumentation is the highest level attainable. Maintain accurate and complete records.

### **ESSENTIAL FUNCTIONS:**

- ➤ Calibrate, perform quality control/quality assurance evaluations and basic troubleshooting for process instrumentation (on-line monitors and chemical feed equipment) which is designed to regulate and monitor the water treatment process, thus assuring all water quality objectives and regulatory standards are met, and maximum water quality is achieved. Conduct daily jar tests, interpret results and make recommendations to Water Treatment Plant Operator (WTPO) for process control. Assist WTPO in dosing of chemicals for water treatment by calculation verification for chemical feed rates to ensure proper chemical feed equipment settings are made.
- ➤ Maintain accurate records of daily quality control reports, lab data summaries, microbiology test and log results into computer data applications to provide proper documentation. Review process results and monitor upper and lower limits of water quality parameters. Collect and analyze miscellaneous samples as assigned. Document maintenance activities of online monitoring equipment in the plant computer maintenance program. Complete preventive maintain work orders in a timely fashion and close out work orders accurately and according to established protocol.
- Interpret and utilize technical data from calibration and verification checks to make accurate and timely assessments of instrument performance. Respond to data and make appropriate calculation adjustment on line equipment throughout the plant. Assist operations personnel in use of data (information) to make water quality treatment adjustments.
- Prepare standards, materials, reagents, and solutions required to perform chemical tests, analyses and calibration examinations on lab bench equipment to establish benchmark values. Grab water samples are conducted to compare results to the bench equipment to ensure accuracy. Maintain proficiency in various analyses as demonstrated by participation and completion of samples in the semi annual proficiency program sponsored by the Wisconsin State Laboratory of Hygiene.
- > Perform other duties as assigned.

Conditions of Employment: Incumbent must work a rotating shift (rotating from 7-3, 3-11, and 11-7 shifts every 4 weeks) and be subject to emergency call-out at any time.

Reasonable accommodations requested by qualified individuals with disabilities will be made in accordance with the Americans with Disabilities Act (ADA) of 1990.

### **MINIMUM REQUIREMENTS:**

1. A Bachelor of Science Degree with a major in Chemistry or related science field from an accredited college or university **and** two years of experience performing chemical analyses in an environmental laboratory.

**NOTE**: Equivalent combinations of education and experience may also be considered.

Note: Copies of college transcripts should be submitted with application or sent to the City of Milwaukee, Department of Employee Relations, ATTN: Box WCII, 200 E. Wells Street, Room 706, Milwaukee, WI 53202 or send via e-mail to *staffinfo@milwaukee.gov.* Student copies are acceptable.

- 2. Must obtain State of Wisconsin Department of Natural Resources Surface Water Municipal Water Supply Operator Certification within six months of employment.
- 3. Residence in the City of Milwaukee within six months of appointment and throughout employment.
- 4. Valid driver's license at time of appointment and throughout employment.
- 5. The physical ability to differentiate and quantify colors and odor.

## **DESIRABLE QUALIFICATIONS:**

Laboratory or operational experience in a surface water purification plant is highly desirable.

### **KNOWLEDGE, SKILLS, AND ABILITIES:**

- Knowledge of proper sample collection and preservation procedures.
- Ability to work with laboratory equipment including pH meters, colorimeters, particle counting equipment, etc.
- Knowledge of drinking water treatment principles and processes is desirable.
- Ability to understand, interpret and apply regulatory requirements and adhere to such.
- Working knowledge of Microsoft Word, Excel, and ability to use and understand basic computer functions, including customized software used for various water treatment plant operations.
- Good problem solving skills and ability to analyze data, trends and formulate hypotheses.
- Good oral and written communications skills.
- Ability to be flexible and work within a team structure.
- Ability to work rotating shifts and, on occasion, extended shifts.
- Ability to follow safety guidelines and polices regarding PPE and other safety gear.
- Ability to analyze reports, summarize findings, do data entry and summarize spreadsheets.
- Ability to lift and carry loads of water samples, containers and coolers up to 50 lbs.
- Ability to work in hot, cold, and humid environments.
- Ability to climb ladders and multiple stairs and enter and exit limited space areas.

**THE SALARY RANGE (2CN) IS:** \$45,906 to \$54,455 annually with excellent benefits. Recruitment is at the beginning of the range.

**THE SELECTION PROCESS** will be job related and will consist of one or more of the following: education and experience evaluation; written, oral or performance tests; or other assessment methods. The Department of Employee Relations reserves the right to call only the most qualified candidates to oral and performance examinations. Oral examinations may include written exercises. Selection process component weights will be determined by further analysis of the job.

The examination will be held as soon as practical after <u>May 4, 2012</u>. Receipt of applications may be discontinued at any time after this date without prior notice. However, recruitment may continue until the needs of the City have been met. Qualified applicants will be notified of the date, time and place of the examination.

**APPLICATIONS** and further information may be obtained in person or by mail from City of Milwaukee Department of Employee Relations, Room 706 City Hall, 200 E. Wells Street, Milwaukee, WI 53202-3554, online at www.milwaukee.gov/jobs, or by calling (414) 286-3751.